

REMARKS

Claim 1-27 are pending in the application. The Office Action has required restriction of the application to one of two inventions as defined by the claims of Group I (claims 1-25) and Group II (claims 26 and 27). No provisional election was made with respect to this restriction requirement. Nevertheless, claims 26 and 27 were withdrawn from further consideration by the Examiner. No claim has yet been allowed.

Claims 1, 7, 13, 19 and 25-27 have been amended. No new matter is introduced.

With entry of the foregoing amendments, the Applicant traverses the restriction of claims 1-27 to Groups I and II and respectfully requests that claims 26 and 27 be reinstated for further consideration.

Election/Restrictions

The Office has required restriction of the application to one of two inventions as defined by the claims of Group I (claims 1-25) and Group II (claims 26 and 27). The restriction is traversed.

Restriction of the claims, at least as now amended, is improper because both claim sets are directed to displaying dynamic page content in a page-caching browser in which a unique identifier is appended to an address for content in order to prevent the browser from loading content from cache. The Applicant respectfully requests reinstatement of claims 26 and 27 for further examination.

Regarding the restriction, the Office Action states that the invention of Group I is drawn to “a dynamic content retrieval system,” while the invention of Group II is drawn to “a dynamic version content management system.” At least with entry of the foregoing amendments to claims 26 and 27, the Applicant believes that the classification of the Group II claims is improper.

Specifically, the amendments to claims 26 and 27 clarify that by appending a unique identifier to the address of content stored on a source (e.g. host server), the stored content is loaded from the source regardless of whether the browser is configured to load content from the cache.

The cache can store versions of content having the same address but different unique identifiers. This is a result of the page-caching client requesting the content from the source using a combination of an address for the content and a unique identifier for each request. Thus, claims 26 and 27 are also drawn to a dynamic content retrieval system and should be classified in the same class and subclass as the Group I invention.

The Office Action further states that the inventions of Groups I and II are related as distinct sub-combinations that are disclosed as being usable together in a single combination. Specifically the Examiner is of the opinion that invention of Group I has separate utility such as "lacking a cache storing different versions of content having the same address but different unique identifiers." As previously discussed, storing versions of content having the same address but different unique identifiers in a cache is a result of requesting stored content from a source using a combination of an address and a unique identifier for each request. Thus, tracking of the different versions of content in the cache is not a requirement of the invention.

Moreover, claims 1, 7, 13, 19 and 25-27 have been amended to clarify that a browser or client transmits a content request with the address and unique identifier to retrieve the stored content from a source regardless of whether the browser is configured to load content from cache. For at least these reasons, the Applicant believes that the invention of Group I is not distinct from the invention of Group II in that the search performed for Group I (claims 1-25) is substantially similar, if not the same, as the search for Group II (claims 26 and 27).

For at least these reasons, the invention of Groups I and II are related and thus are not distinct inventions. In sum, we disagree with the restriction of claims 1-27 into Groups I and II and respectfully request that claims 26 and 27 be reinstated in this application for further examination.

Claim Rejections - 35 U.S.C. §§ 102, 103

Claims 1, 2, 6-8, 12-14, 18-20 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,740,430 to Rosenberg et al. Claims 3-5, 9-11, 15-17, and 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosenberg. In response, claims 1, 7, 13, 19 and 25-27 have been amended.

Most browsers have the ability to cache web pages by caching the constituent script and content files as they are loaded. If a web page is static (e.g. does not change often), loading page content from cache improves browser performance by avoiding additional network and processing delays. However, if a web page is updated often or displays content that depends on the state of the user's session, loading page content directly from cache can result in the display of unintended page content.

The present invention includes a system and method for displaying dynamic page content in a page-caching browser or other client by allowing the browser to load page content from a source (e.g. host server) regardless of whether page-caching is enabled. By forcing the browser to request content from the source as opposed to cache, the display of unintended page content is avoided even if a browser is configured to always attempt to load content from cache.

Specifically, the system and method prevent the loading of unintended page content from a cache into a browser by ensuring the uniqueness of the content request. Such embodiments include (i) specifying an address to stored content at a source; (ii) appending a unique identifier to the address, the appended identifier being unique for each request of the content, the unique identifier preventing the browser from loading content associated with the address from a cache; (iii) transmitting a content request with the address and the unique identifier to retrieve the stored content from the source regardless of whether the browser is configured to load content for display from the cache. Claims 1, 7, 13, 19 and 25-27 have been amended to recite these features. Support for these amendments can be found at least in FIG. 2A and in the specification as originally filed on page 8, line 4 through page 9, line 20.

By appending a unique identifier to the requested address, each content request is unique, and, thus, prevents the browser from locating and loading corresponding content from the cache. For example, where a query string contains the unique identifier, it is highly unlikely that a URL address and query string will be generated that is identical to any URL/query string combination in the cache. Subsequent requests for the content may have the same address, but the unique identifier specified in the query string will be different. When the browser checks the cache for the cache content corresponding to the unique address/identifier combination, the unique

identifier prevents such association. Thus, the browser is forced to transmit the request to the source.

In contrast, Rosenberg does not teach or suggest a method or system for displaying dynamic page content in a page-caching browser in which a unique identifier is appended to an address for content to prevent the browser from loading the content from cache. Rather, Rosenberg discusses a method and apparatus for operating a client-server computer network such that a server computer dynamically generates and then stores customized pages requested from a client computer. Subsequent requests for previously generated customized pages are then retrieved from cache. (See Rosenberg, col. 1, l. 52 through col. 2, l. 27)

Specifically, Rosenberg discusses a "front door" server program that transforms a file request sent from the browser into a customized file request. The customized file request includes the original file request from the browser and at least one selected attribute of the computer user, such as a browser name, computer domain or a computer platform. Such attributes are not unique. The client is then redirected back to the server using the customized file request. (See Rosenberg, col. 2, ll. 6-10; col. 3, ll. 13-50).

The use of the selected attribute in Rosenberg is not intended to prevent the browser from loading the content from cache. Rather, the selected attribute is used to determine (i) what display features are supported in the requesting client computer and (ii) whether a dynamically generated customized page is available for that computer user in cache and, if so, to forward the cached version of the customized page to the client. (See Rosenberg, col. 4, ll. 12-55)

Rosenberg expressly states that his invention is "highly advantageous because it does not require the dynamic-generation of a customized page every time a customized page is requested." (See Rosenberg, col. 2, ll. 15-20) (Emphasis added). This is in direct contrast to the present invention appends the unique identifier to an address for content to prevent the browser from loading the content from cache and, thus, force the browser to load the content from the source.

For at least these reasons, claims 1, 7, 13, 19 and 25-27 are novel and non-obvious in view of the prior art of record, and thus are believed to be patentable.

By virtue of at least their dependency upon these independent claims, dependent claims 2-6, 8-12, 14-18 and 20-24 are also patentable.

Claim Rejections-35 U.S.C. § 103

Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosenberg in view of U.S. Patent 6,742,126 to Mann et al. The Examiner acknowledges that Rosenberg does not disclose that his client appends a unique identifier to the address. However, the Examiner is of the opinion that Mann discloses this feature.

Specifically, the Office Action states that it would have been obvious to combine the teachings of Mann with Rosenberg in order to allow host computers to differentiate between multiple clients submitting identical identifying information during overlapping sessions as supported by Mann. In response, claim 25 has been amended.

Claim 25 has been amended to clarify that by appending a unique identifier to a specified address in a request for content that is stored on a source, the unique identifier prevents the client from loading content from the cache even if the client configured to load content from a cache. The unique identifier is unique for each content request. Support for these amendments can be found at least in FIG. 2A and in the specification as originally filed on page 8, line 4 through page 9, line 20.

In contrast, Mann does not teach or suggest a method or system for displaying dynamic page content in a page-caching browser in which a unique identifier is appended to an address for content to prevent the browser from loading the content from cache. Specifically, Mann does not teach or suggest that the identifier is unique for each request for the content.

Rather, Mann discusses a method and apparatus for merely identifying a data communication session. Specifically, Mann discusses a method and apparatus in which a session identifier is generated and passed between a client and server with each data transfer until the session is terminated. The session identifier is fixed for the entire session. (See Mann, Abstract; col. 2, ll. 24-45; col. 3, l. 65 through col. 4, l. 6).

Because the session identifier is fixed for the session, the browser or client cannot transmit content request for stored content at a server regardless of whether the browser is configured to load content from the cache. This is because the session identifier is not unique for

each content request. Thus, when the browser references the cache, it will be able to locate and retrieve previously loaded content that is associated with the address and session identifier.

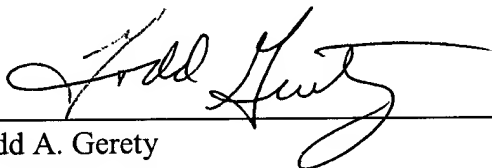
For at least this additional reason, claim 25 is also believed to be novel and non-obvious, and thus patentable.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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